23 24 25

EXHIBIT

1	differences might be an SOP might be more of a
2	form-type of document that might lay the steps but
3	might not have, you know, an introduction, and a
4	sampling analysis plan might have a little more
5	background to the project and things like that. 09:41AM
6	Q Okay, but would a sampling analysis plan
7	contain, for instance, procedures to be followed in
8	a field investigation?
9	A Yes.
10	Q Okay. So basically you're saying that an SOP 09:41AM
11	is more detailed?
12	A No, I wouldn't say it's more detailed.
13	${f Q}$ I guess I'm not understanding the distinction.
14	A I think the format, you know, might be
15	different. I would think of a sampling analysis 09:42AM
16	plan, I think I just mentioned this, might have a
17	little more background to the project and would
18	identify, you know, how you are going to, you know,
19	collect samples and, you know, the types of
20	equipment you're going to use and all the things 09:42AM
21	necessary to get good, you know, reliable samples,
22	and I think an SOP more might be something that's
23	more more of a format thing, more of a set of,
24	you know, numbered instructions.
25	Q Okay. Okay. So those distinctions being 09:42AM

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1	whatev	er they are aren't have you ever actually	
2	drafte	d an SOP?	
3	A	Not an SOP per se.	
4	Q	Okay.	
5	A	I have drafted procedures for conducting, you	09:43AM
6	know,	activities	
7	Q	Okay.	
8	A	that I wouldn't necessarily call it I	
9	wouldn	't use the terminology SOP.	
10	Q	Okay. You ever collected a poultry waste or	09:43AM
11	litter	sample?	
12	A	No.	
13	Q	You ever collected any animal waste or litter	
14	sample	?	
15	A	Animal waste, yes.	09:43AM
16	Q	What kind?	
17	A	Cow manure.	
18	Q	What project?	
19	A	It was in Wisconsin.	
20	Q	In Wisconsin, and what type of project was it?	09:44AM
21	A	I think it was in CNMP development.	
22	Q	Say that again.	
23	A	We were developing comprehensive nutrient	
24	manage	ment plans.	
25	Q	For cattle operations?	09:44AM

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1	Q	Who took the seep sample?	
2	A	Someone, another CRA employee.	
3	Q	Okay, and was that pursuant to an SOP?	
4	A	Yes, it was.	
5	Q	And would CRA retain that SOP?	09:48AM
6	A	Yes, yes.	
7	Q	Okay. Have you ever taken a residential well	
8	sample	e?	
9	A	Yes.	
10	Q	Outside of this project?	09:48AM
11	A	Yes.	
12	Q	And when was that?	
13	A	1985.	
14	Q	What site was that?	
15	A	I don't recall the name of the site. It was a	09:49AM
16	home :	in Ontario.	
17	Q	What was the purpose for taking the this	
18	reside	ential well sample?	
19	A	I don't recall; I don't recall. It was a long	
20	time a	ago.	09:49AM
21	Q	Okay, and was that done pursuant to an SOP?	
22	A	I don't recall.	
23	Ω	Okay. Have you ever conducted environmental	
24	sampl:	ing concerning non-point source runoff?	
25	A	No.	09:50AM

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1	Q	Have you ever conducted an environmental	
2	invest	igation of an entire watershed?	
3	A	No.	
4	Q	Have you ever conducted soil sampling for the	
5	purpos	es of investigating soil phosphorus content?	09:50AM
6	A	No.	
7	Q	More generally, have you ever conducted soil	
8	sampli	ng for the purpose of investigating soil	
9	nutrie	ent content?	
10	A	Soil sampling?	09:51AM
11	Q	Yes.	
12	A	No.	
13	Q	Have you ever conducted soil sampling for the	
14	purpos	e of investigating bacteria content?	
15	A	No.	09:51AM
16	Q	Have you ever conducted surface or groundwater	
17	sampli	ng for the purpose of investigating phosphorus	
18	levels	?	
19	A	No.	
20	Q	Have you ever conducted surface or groundwater	09:51AM
21	sampli	ng for the purposes of investigating nutrient	
22	levels	??	
23	A	Do you mind repeating the question?	
24	Q	Yeah. Have you ever this is kind of just	
25	the mo	ore general question. Have you ever conducted	09:52AM

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1.	surfac	e or groundwater sampling for the purposes of	
2	invest	igating nutrient levels?	
3	A	No.	
4	Q	Okay. Have you ever taken an edge of field	
5	sample	?	09:52AM
6	A	That's a broad question. Can you be more	
7	specif	ic, please?	
8	Q	Well, like, for instance, a sample of material	
9	that's	running off of a field.	
10	A	What kind of material?	09:52AM
11	Q	Any.	
12	A	A sample of material that's running off a	
13	field?	Not that comes to mind, no.	
14	Q	Okay.	
15	A	Can I get some water, please?	09:53AM
16	Q	Do we need to break?	
17	A	I don't need a break. I just want some water.	
18		MR. McDANIEL: We got about ten minutes or	
19	so unt	il the end of the tape, so go ahead.	
20	Q	As part of CRA's work on this project, did CRA	09:53AM
21	actual	ly take any samples?	
22	A	I'm not aware that we took samples.	
23	Q	Okay. Did you take or collect split or	
24	co-loc	cated samples that were collected by CDM?	
25		MR. McDANIEL: Object to the form.	09:53AM

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ı			
1	Q	What about groundwater?	
2	A	I don't know.	
3	Q	Soil samples?	
4	A	I don't know.	
5	Q	Has anyone analyzed these split samples to	09:56AM
6	your k	knowledge?	
7	A	I believe I believe at least some of the	
8	sample	es were analyzed.	
9	Q	By whom?	
10	A	I don't I can't tell you or I don't know	09:56AM
11	the na	ame of the laboratory, laboratory or	
12	labora	atories.	
13	Q	Have you reviewed any of the analytical data?	
14	A	No, I haven't.	
15	Q	Has anyone from CRA reviewed the analytical	09:56AM
16	data?		
17	A	I don't believe so, no.	
18	Q	Okay. Do you know what the purpose was for	
19	taking	g the splits?	
20	A	No, I don't.	09:57AM
21	Q	Do you know the purpose of the analysis of the	
22	splits	5?	
23	A	No. I wasn't involved in that part of the	
24	projec	et.	
25	Q	Okay. Do you know whether anyone retained by	09:57AM

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1.	ever i	mplemented a soil sampling SOP?	
2	A	Yes.	
3	Q	Okay, and what was that?	
4	A	I'd like to rephrase that. I implemented a	
5	sampli	ng analysis plan, in which soil sampling was a	10:18AM
6	compon	ent of that.	
7	Q	Okay. So you haven't actually during your	
8	time a	s a project manager implemented a soil	
9	sampli	ng SOP?	
10	A	I've implemented a soil sampling analysis	10:18AM
11	plan.	I don't normally I use the term sampling	
12	analys	is plan.	
13	Q	Okay, but you did testify earlier that in your	
14	mind t	there's a distinction between an SOP and a	
15	sampli	ng analysis plan?	10:18AM
16	A	Yes.	
17	Q	Okay, and just to clarify again, the during	
18	your e	experience as a project manager, you haven't	
19	implem	mented what you would consider to be a soil	
20	sampli	ng SOP; correct?	10:19AM
21	A	Correct.	
22	Q	What was the what was the sampling analysis	
23	plan t	that had aspects of soil sampling that you	
24	implem	mented?	
25	A	Can you ask the question again?	10:19AM

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1	Q	Okay. When was the last time that you	
2	actual	ly collected a soil sample?	
3	A	I don't know the date. Several years ago.	
4	Q	Could you give me a range?	
5	A	I would guess in the early, you know, early	10:37AM
6	2000s,	maybe around 2000.	
7	Q	Okay. Would that have been the project at	
8	Sacram	mento?	
9	A	No.	
10	Q	What project would that have been?	10:37AM
11	A	I can't think offhand the last time I	
12	collec	cted a soil sample. It's been several years,	
13	like 1	I said.	
14	Q	Okay. So you don't recall a specific project?	
15	A	No.	10:37AM
16	Q	Mr. Churchill, do you consider yourself to be	
17	an exp	pert on environmental sampling?	
18	A	Yes.	
19	Q	And what's the basis for that belief?	
20	A	I've had a lot of experience collecting	10:38AM
21	enviro	onmental samples of many different sample	
22	medium	m. I'm very familiar with EPA guidances and	
23	indust	try standards on collection of samples, of	
24	enviro	onmental samples.	
25	Q	Okay. Industry standards you just mentioned,	10:38AM

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1	- and th	nat's mentioned several times in your report,	
2	is it		
3		Yes.	
_	A		
4	Q	When you use industry standards in your	
5	report	, what industry are you referring to?	10:38AM
6	A	The environmental industry.	
7	Q	From where do you derive these industry	
8	standa	rds?	
9	A	Well, US EPA is one source. There might be	
10	other	state guidances.	10:39AM
11	Q	Any others?	
12	A	Not that come to mind. I suppose there could	
13	be loc	cal guidances but that would not be the norm.	
14	Q	Do you agree with me that there can be	
15	profes	ssional disagreements about what the industry	10:39AM
16	standa	ards are?	
17		MR. McDANIEL: Object to the form.	
18	A	Do you mind asking the question again?	
19	Q	Yeah. Do you agree with me that there can be	
20	profes	ssional disagreements about what the industry	10:39AM
21	standa	ards are?	
22		MR. McDANIEL: Object to the form.	
23	A	I believe there shouldn't be disagreements on	
24	that.	I mean, people who are involved in the	
25	enviro	onmental industry, particularly those involved	10:40AM
	I		

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1	soil samples were analyzed for bacteria, yes.	
2	Q Okay, and your testimony is that but you've	
3	done no analysis of that data?	
4	A I've done no analysis of the data, but I don't	
5	feel I need to do an analysis of the data.	12:30PM
6	Q Okay. Gotcha. On Page I hope this is	
7	right 15 of your report, the first full	
8	paragraph, you claim that CRA believes that some or	
9	all of the modifications that you discussed, and	
10	that's in the context of making them what you say is	12:30PM
11	less stringent; correct?	
12	A Yes.	
13	Q Okay. That those modifications to make	
14	revisions in 8 and 9 less stringent may have been	
15	made to compensate for the fact that CDM's sampling	12:31PM
16	personnel were not properly following the sampling	
17	and equipment decontamination procedures and	
18	sampling QA/QC requirements specified in the CDM	
19	work plan in Revision 7 of SOP 5-1; do you see that?	
20	A Yes.	12:31PM
21	Q And you use the word may there, do you not?	
22	A Yes, I used that word.	
23	Q Do you have any personal knowledge about the	
24	actual reason that any of those changes to Revisions	
25	8 or 9 were made?	12:31PM

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1	Q	You think you know?	
2	A	Well, I do know.	
3	Q	Okay. So you want to revise your report now?	
4	A	No. I know all	
5	Q	Now you say you do know. In your report you	12:34PM
6	say y	ou believe that the changes may have been made	
7	becaus	se. Now you're saying you do not.	
8	A	Based on the information I have, I believe	
9	it's a	an applicable opinion.	
10	Q	Okay. Do you know or don't you	12:34PM
11		MR. McDANIEL: Object to the form.	
12	Q	why the changes were made?	
13		MR. McDANIEL: Object to the form. It's	
14	been a	asked and answered. It's argumentative.	
15	Q	You can answer.	12:34PM
16	A	Pardon me?	
17	Q	You can answer.	
18	A	Based on the information I have, I believe the	
19	stater	ment is accurate, and so	
20	Q	The statement in the report is accurate?	12:34PM
21	A	Right.	
22	Q	Okay. Did you ever conduct any analysis as to	
23	whethe	er any of the these modifications to	
24	Revis	ion 8 or 9 had any impact at all on the soil or	
25	litte	r sampling data?	12:35PM

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1.	A We did not conduct any analysis, but you don't	
2	need to conduct an analysis to know that, you know,	
3	not decontaminating sampling equipment, and when I	
4	see a soil probe driven through a cow patty, I don't	
5	need to conduct an analysis or review data to say	12:35PM
6	that it would have had an impact.	
7	Q Okay. So, again, the answer is no, you did	
8	not conduct any analysis of the data?	
9	A You do not need to conduct an analysis to do	
10	that.	12:35PM
11	Q And you did not?	
12	A That's correct, I did not.	
13	Q Would you agree with me that the word may	
14	indicates a degree of speculation?	
15	MR. McDANIEL: Object to the form.	12:36PM
16	A Yes.	
17	Q Okay. Did you ever make any inquiry to CDM as	
18	to any of their reasons why any of the revisions	
19	were made to Version 8 or 9 of SOP 5-1?	
20	A We did not inquire to CDM, no.	12:36PM
21	Q Okay. Did any CDM personnel notify you that	
22	he or she was confused about the meaning of the term	
23	grid, subarea grid location, sampling area or	
24	sampling location?	
25	A First part of your question said did any CDM	12:37PM

1.	back the previous question at Page 109, Lines			
2	10-14.)		
3	A	Okay. That's not it. That's fine.		
4	Q	Okay. Prior to your work on this project,		
5	have y	you ever done an analysis of whether cross	01:46PM	
6	contam	nination had occurred in a field investigation?		
7	A	No, I hadn't.		
8	Q	Okay.		
9	A	We didn't need to do an analysis here.		
10	Q	Okay. The answer is no; right?	01:46PM	
11	A	Correct.		
12	Q	Okay. Can you point to any part of the SOPs		
13	genera	ted by CDM which required decontamination		
14	betwee	en soil samples within a single core sample?		
15	A	The beginnings of that I heard the last	01:47PM	
16	part o	of that, but the beginning of the question was?		
17	I'm so	orry.		
18	Q	Can you point to any part of the COPs SOPs		
19	genera	ated by CDM which required decontamination		
20	betwee	en soil samples within a single core sample?	01:47PM	
21	A	No.		
22	Q	Can you point to any part of the SOPs		
23	genera	ated by CDM which required decontamination		
24	betwee	en cores within a grid location?		
25	A	No.	01:47PM	

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1	going to remove these things that were, you know,	
2	seemingly visible. You know, what about the	
3	components that wouldn't have been visible and the	
4	smaller components that wouldn't pass through a	
5	sieve, okay? I believe all of those would have	02:39PM
6	affected the, you know, integrity of the sample and	
7	the analytical results.	
8	Q But, again, you didn't review any of the	
9	analytical results, did you?	
10	A No, no. When you know it's in the samples and	02:39PM
11	what the samples come into contact with, you don't	
12	need to.	
13	Q Object as non-responsive. Going down to the	
14	sixth bullet point beginning with it says the	
15	sample, do you see that, sample will be hand mixed?	02:39PM
16	A Right.	
17	Q Will you read that into the Record?	
18	A Sure. The sample will be hand mixed using the	
19	plastic scoop or stainless spoon for at least five	
20	minutes or until particles are of uniform size.	02:40PM
21	Q And you don't know one way or the other	
22	whether the CDM lab complied with this procedure, do	
23	you?	
24	A That's correct.	
25	Q Did you consider the impact of this	02:40PM

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1	A	I believe so.	
2	Q	Where?	
3	A	When I discussed the reliability of the data	
4	or the	representativeness of the data.	
5	Q	Okay. I don't recall ever seeing any	02:42PM
6	discus	sion of this process in your report.	
7	A	There might be I think what you asked me is	
8	whethe	r I considered that, and the idea is, yes, I	
9	consid	ered it. Doesn't mean I spelled it out, that	
10	fact i	n the work.	02:42PM
11	Q	Okay. How did you consider it?	
12	A	Well, I considered that, you know, various	
13	consti	tuents, and I'm thinking most in particular	
14	the so	il samples, such as manure that might have	
15	been c	on the probe might have gone into the samples.	02:43PM
16	You kr	now, some of that material would have been	
17	expect	ed to break down and, you know, and pass	
18	throug	h a sieve, and then so would actually be	
19	includ	ded in the portion of the sample that was	
20	actual	ly analyzed. So I considered that when I was,	02:43PM
21	you kr	now, making comments about the	
22	repres	sentativeness of the data.	
23	Q	Did you do any analysis of the potential	
24	weight	of that material that would actually make it	
25	throug	gh this mixing and sieving process?	02:43PM
	1		

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1	A	No, I did not.	
2	Q	Okay. Just for clarity, you don't have any	
3	opinio	on as to whether the CDM lab complied with this	
4	sievin	ng process, do you?	
5	A	No, no.	02:43PM
6	Q	Okay. If you turn to page back to your	
7	report	t, Page 31, starting with the second sentence	
8	of the	e first full paragraph that begins with	
9	state	ments.	
10	A	Uh-huh.	02:44PM
11	Q	Could you read that through the end of the	
12	paragi	raph, please, into the Record?	
13	A	Okay. I just want to read the first part of	
14	this	as well. Hold on.	
15	Q	Okay.	02:44PM
16	A	Statements made by CDM in Section 3.1.2, Page	
17	3-21	of the Olsen report, however, would indicate	
18	that	the, quote, absence of cross contamination, end	
19	quote	, portion of CDM's definition of representative	
20	was n	ot important to CDM, specifically in the second	02:45PM
21	parag:	raph of Section 3.1.2, cross contamination	
22	evalua	ation. On Page 3-21 of the Olsen report, it	
23	state	s, quote, for this data use, any cross	
24	contai	mination between the intervals would not matter	
25	becau	se an average value of all three intervals is	02:45PM

1	A Well, I might not necessarily I don't agree	
2	that you can based on the way the soil samples	
3	were collected, I don't believe you could average	
4	the individual results and come up with a number	
5	that's representative of the top six inches.	03:02PM
6	$oldsymbol{Q}$ Okay. Going over to 3-23, do you see that	
7	table in the middle of the page?	
8	A Yes.	
9	$oldsymbol{\mathtt{Q}}$ Do you recall reviewing this in preparation of	
10	either of your reports?	03:02PM
11	A No, not really. I glanced at it, and I didn't	
12	review it in any detail for sure.	:
13	$oldsymbol{\mathtt{Q}}$ Do you understand that this table shows Dr.	
14	Olsen's calculation of the maximum amount of cross	
15	contamination in all soil intervals from soil	03:03PM
16	remaining on the core probe?	
17	MR. McDANIEL: Object to the form.	
18	A Yeah. I don't know what he's trying to show	
19	here. Looks like he's trying to show some RPDs.	
20	Q Okay.	03:03PM
21	A I don't know.	
22	Q So if you don't know, am I correct that you	
23	haven't conducted any analysis to respond to the	
24	data in this table?	
25	A I don't need to conduct an analysis to know	03:03PM

1	that samples were compromised.
2	Q So that's a no, you haven't?
3	A Not to conduct an analysis, no.
4	Q Okay. Do you dispute Dr. Olsen's finding that
5	the potential changes in concentrations caused by 03:03PM
6	maximum amount of possible cross contamination on
7	the core probe do not result in any substantial
8	concentration changes, and the relative percent
9	changes are always much less than that observed due
10	to documented variability in the soil and laboratory 03:04PM
11	analysis?
12	MR. McDANIEL: Object to the form.
13	A Yes, I dispute that.
14	Q On what basis?
15	A The basis that I think his calculations did 03:04PM
16	not include his calculations of cross
17	contamination did not include some of the largest
18	some of the greatest reasons why soil samples were
19	contaminated.
20	Q Like what? 03:04PM
21	A The way the samples were collected, dragging
22	material. I mean, the sample zero to two, two to
23	four, four to six-inch depth intervals were not
24	truly representative of what they are trying to say
25	they are. 03:04PM

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1	Q	How do you know?	
2	A	Because I observed soil sample collection, and	
3	I obse	rved that material from the four to six-inch	
4	layer	was pulled into the sample from the two to	
5	four-i	nch layer, and I observed that material from	03:05PM
6	the tw	o to four-inch layer was pulled into the	
7	sample	from the zero to two-inch layer.	
8	Q	But, again, you've done no analysis,	
9	statis	tical analysis of the potential cross	
10	contam	ination, have you?	03:05PM
11	A	Well, you don't need to do an analysis when	
12	you ca	n visually identify that you can see soil from	
13	one de	pth interval being included in a sample that	
14	they'r	e purporting is being representative of a	
15	differ	ent depth.	03:05PM
16	Q	But you haven't done a statistical analysis?	
17	A	No, I did not make a calculation.	
18	Q	All right. In your report you state that	
19	commen	ting on the Olsen report discussion of natural	
20	sample	variability and analytical variability is	03:05PM
21	beyond	the scope of your opinions. Do you recall	
22	that?		
23	A	Yes.	
24	Q	And you've not offered any measurement of	
25	natura	l sample variability of your own which differs	03:06PM

1	
1	that?
2	A Yes.
3	Q Is that consistent with what CRA observed in
4	the field?
5	A I don't recall seeing what they did with it 03:27PM
6	after use.
7	Q Okay. Just as a general matter, is there any
8	need to decontaminate a one-time use sampling
9	device?
10	A It's good practice, yes. The answer is yes, 03:27PM
11	there is a need to decontaminate so you know what
12	you're starting with. You know you have a clean
13	sampling equipment to start with that has not been
14	impacted by, you know, some other sources that you
15	might not even be aware of. 03:28PM
16	Q Oh. So you're saying decontaminate before you
17	take the sample?
18	A For a single use?
19	Q Yeah.
20	A Sure. You should make sure that you're using 03:28PM
21	clean equipment, and one way of making sure you're
22	using clean equipment would be to decontaminate it
23	prior to use.
24	Q Okay. Are you aware of any EPA or other state
25	guidance document that says that you should 03:28PM

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1	decontaminate one-time use sampling equipment?	
2	A It's I would say it's pretty common	
3	knowledge in the industry to use clean equipment	
4	prior to initiating a sampling program. You know,	
5	you might not find an EPA guidance that specifically	03:29PM
6	states that you must decon equipment prior to single	
7	use.	
8	Q Okay.	
9	A Just because it's not it may not be written	
10	down doesn't mean it's not the norm and not	03:29PM
11	appropriate.	
12	$oldsymbol{Q}$ Is it possible to generate a decontamination	
13	blank if the sampling equipment is only used once?	
14	A I don't think you would call it a	
15	decontamination blank.	03:29PM
16	Q Okay. So no?	
17	A You can't generate a decontamination blank if	
18	you haven't done any decontamination.	
19	Q Right. Thank you. So with that in mind,	
20	would there be any need for CDM to have an SOP	03:29PM
21	provision with respect to its litter sampling	
22	program requiring the collection and submission of	
23	decontamination blanks?	
24	A Yes. It's just really just, you know, good	
25	practice to do you mind repeating that? Sorry.	03:30PM

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1.	fertilizer leaking at the co-op with rips in them			
2	and things like that. So that's why it's			
3	appropriate to make sure that you have that you			
4	know what you are starting your sampling with.			
5	Q Okay. What about after the sample is taken; 03	:31PM		
6	then you need to have do a decontamination blank			
7	for one-time use equipment?			
8	A After a sample?			
9	Q Yeah.			
10	A After an environmental sample is collected? 03	:31PM		
11	Q Yes.			
12	A Is there ever any you are confusing terms.			
13	You wouldn't take a decontamination blank after			
14	collecting a sample of the medium itself.			
15	Q Right. I mean, if it's a one-time use, you're 03	:32PM		
16	not decontaminating it after you use it; you're not			
17	going to collect a decontamination blank?			
18	A It was appropriate to if they were not			
19	going to decontaminate their equipment, for sure	,		
20	it's appropriate to collect, you know, a blank. 03	:32PM		
21	Call it a field blank, call it a presample			
22	collection blank, sampling equipment			
23	characterization blank.			
24	Q Okay. Thank you. You are you're also			
25	critical of CDM for leaving the manufacturer's label 03	:32PM		

1	on the	shovel prior to taking litter samples;		
2	correct?			
3	A	Yes.		
4	Q	If CDM had removed the label, would you have		
5	any co	ncern that the adhesive residue could cause	03:33PM	
6	litter	to stick to the shovel?		
7	A	Yes.		
8	Q	Okay. If CDM had removed the label, would you		
9	have a	ny concern about the adhesive residue being		
10	introd	uced into the litter samples?	03:33PM	
11	A	Yes.		
12	Q	Do you contend that the label material itself		
13	posed	any significant measurable contribution to any		
14	of the	e litter analytical parameters?		
15	A	I don't I don't have the information to,	03:33PM	
16	you kr	ow, formulate an opinion on how much may have		
17	gotten	there. I can just tell you it's not the norm		
18	to sam	uple without knowing what is on the sampling		
19	equipm	ment.		
20	Q	Have you conducted any analysis of whether any	03:33PM	
21	labeli	ng material impacted the litter sampling data?		
22	A	No. I've conducted enough sampling that I		
23	know t	that you're not supposed to leave labels on		
24	your s	sampling equipment prior to collecting samples.		
25	Q	Is there can you point me to any guidance	03:34PM	

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1	document that says that?			
2	A	No. I mean, like I've said, not everything		
3	has to	be written down to know it's not the standard		
4	of car	e that you do.		
5	Q	But that's your standard?	03:34PM	
6	A	I think that's a pretty much an industry		
7	standa	rd.		
8	Q	Okay. Going back to 5-1, if you look at Page		
9	9 and,	again, this is Exhibit 6. Are you there?		
10	A	Yes.	03:35PM	
11	Q	Do you see Subsection 4.6?		
12	A	Yes.		
13	Q	And what's the heading?		
14	A	Decontamination Procedures.		
15	Q	Would you read the first sentence into the	03:35PM	
16	Record	, please?		
17	A	Full decontamination will occur between every		
18	LAL pr	operty or upon exit of the grower's field onto		
19	a public right-of-way.			
20	Q	Do you agree that Subsection 4.6 is the	03:35PM	
21	decont	amination procedure subsection of Revision 9?		
22	A	No. I believe that's one place where		
23	decontamination is mentioned.			
24	Q	What's again, what's the heading?		
25	A	The heading is Decontamination Procedures.	03:36PM	

1	Q Yeah. Based on your observations and that you
2	document.
3	A The total weight from all depth intervals that
4	was emptied into a sample bag, that's all sample
5	inter all the material from all sample intervals 04:19PM
6	were not emptied into a sample bag. CDM attempted
7	to collect the zoned samples. So they collected,
8	you know, material. You know, at any given probe
9	location, they tried to collect three discrete
10	samples. 04:19PM
11	Q Right, but your complaint is about tipping the
12	soil sample probe to empty remaining soil into the
13	sample bag; that was an observed claimed deficiency;
14	correct?
15	A Yes, that's correct. 04:19PM
16	Q And what I'm asking is, do you know what the
17	total weight of that remaining soil from the sample
18	depth intervals is?
19	A I think I might have done some
20	back-of-the-envelope type of calculations to 04:20PM
21	indicate that, you know, the weight of material in a
22	two-inch depth interval might have been on the
23	order, if I recall correctly, of, you know, 100
24	grams, but, you know, that would assume he had full
25	recovery, but if, you know, by tipping the probe, 04:20PM

1		
1.	you are also getting material from lower depth	
2	intervals, you know, into that sample bag as well.	
3	Q Okay.	
4	A You know, it depends on what you know, how	
5	much recovery you actually got in the probe and, you	04:20PM
6	know, how much was left in there from the	
7	previous from the lower sample intervals, you	
8	know, when they went to tip the bag.	
9	Q Is that calculation reflected in the report?	
10	A No, it's not in the report.	04:21PM
11	Q You talked about this several times today, but	
12	you also complain about alleged observed instances	
13	where the sampling probe was advanced through cow	
14	manure; correct?	
15	A Correct.	04:21PM
16	Q And CRA claims to have observed twelve	
17	sampling areas where the probe was advanced through	
18	cow manure; correct?	
19	A Do you mind if I just check a number here?	
20	Q That's fine.	04:21PM
21	A You said twelve sampling areas; correct?	
22	Q Yeah.	
23	A Yes.	
24	Q Okay. Do you know how many of these twelve	
25	sampling areas, samples from these twelve sampling	04:22PM

1	Q If you haven't conducted any analysis of the	
2	FAC-08 data, how can you be sure that there was in	
3	fact soil from the poultry house floor in that	
4	sample?	
5	A One of our field people observed and	04:44PM
6	documented that it was present in the sample.	
7	Q So just based on the observation?	
8	A Yes.	
9	Q Okay. Aside from FAC-06, which is dropped	
10	from the evaluation, and FAC-08, do you assert that	04:44PM
11	there are any other litter samples which were	
12	compromised by the presence of soil on the poultry	
13	house floor?	
14	A I can't testify that there were more. I don't	
15	have any direct evidence that there were. I can	04:45PM
16	tell you that the numbers in this table represent	
17	the minimum. I can't tell you I cannot tell you	
18	that there were more than that.	
19	Q You just don't know one way or the other?	
20	A I can tell you that there were at least two	04:45PM
21	samples. I can't say any more than that.	
22	Q Okay. You claim in your report that litter	
23	composite samples were not properly mixed. Do you	
24	recall that?	
25	A Yes.	04:45PM

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1	occoptibility all of the compling activities that we			
_	essentially all of the sampling activities that we			
2	were involved in, I believe that would have been			
3	documented, yes.			
4	Q By either video or			
5	A By either video or	04:51PM		
6	Q By video or still picture?			
7	A Yes.			
8	Q Do you agree that litter from the production			
9	of poultry within the Illinois River watershed			
10	contains phosphorus?	04:51PM		
11	A Do I believe that poultry litter contains			
12	from the IRW contains phosphorus?			
13	Q Yes.			
14	A I would believe after a reasonable I			
15	believe that's reasonable, yes.	04:51PM		
16	Q Do you agree that litter from the production			
17	of poultry within the IRW contains bacteria?			
18	MR. McDANIEL: I want to object. It's			
19	outside the scope of his report. Go ahead.			
20	A Yeah. You know, we're getting probably beyond	04:52PM		
21	my area of expertise on, you know, the exact			
22	constituents contained in poultry litter.			
23	Q Okay. You've also been critical of CDM for			
24	certain spring sampling activities; correct?			
25	A That's correct.	04:52PM		

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1	Q	Specifically you claim that certain spring	
2		es contain suspended sediments; correct?	
3	A	Correct.	
4	Q	Did you examine any of the actual spring	
5	sampli	ing data?	04:52PM
6	A	No, I did not examine the data.	
7	Q	So you don't know whether the spring sampling	
8	data s	showed the presence of suspended sediment?	
9	A	You don't need to review data to observe that	
10	water	samples were collected from areas with	04:53PM
11	susper	nded sediments.	
12	Q	But the answer is, no, you don't know	
13	whethe	er	
14	A	There's no reason no need to review the	
15	data t	to come up with that conclusion.	04:53PM
16	Q	That's not my question. I'm just asking you a	
17	simple	e question of whether you know whether any of	
18	the sp	pring sampling data showed the presence of	
19	susper	nded sediments. Do you know?	
20	A	No, I don't know if the data showed that. I	04:53PM
21	know n	my eyes showed that.	
22	Q	Do you know how many samples CDM took from	
23	each s	spring sampling location?	
24	A	How many samples meaning, you know, how many	
25	indivi	dual samples like how many individual sample	04:54PM

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